# Mouse LOXL2 / Lysyl oxidase homolog 2 Protein (His Tag)

Catalog Number: 53068-M08H



# **General Information**

# Gene Name Synonym:

1110004B06Rik: 4930526G11Rik: 9430067E15Rik

#### **Protein Construction:**

A DNA sequence encoding the mouse Loxl2 (NP\_201582.2) (Met1-Gln776) was expressed with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

**QC** Testing

Purity: > 80 % as determined by SDS-PAGE

# **Bio Activity:**

Measured by its ability to produce hydrogen peroxide during the oxidation of benzylamine.

The specific activity is > 3pmoles/min/µg.

#### **Endotoxin:**

< 1.0 EU per  $\mu$ g protein as determined by the LAL method.

Predicted N terminal: Gln 26

#### **Molecular Mass:**

The recombinant mouse Loxl2 consists 762 amino acids and predicts a molecular mass of 85.9 kDa.

#### Formulation:

Lyophilized from sterile 20 mM MES, 150 mM NaCl, pH 6.5.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

# **Usage Guide**

### Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

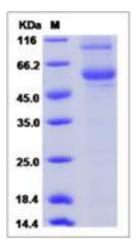
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

# Reconstitution:

Detailed reconstitution instructions are sent along with the products.

#### SDS-PAGE:



# **Protein Description**

Lysyl oxidase homolog 2, also known as Lysyl oxidase-like protein 2, Lysyl oxidase-related protein 2, Lysyl oxidase-related protein WS9-14 and LOXL2, is a secreted protein which belongs to thelysyl oxidase family. LOXL2 contains fourSRCR domains. The lysyl oxidase family is made up of five members: lysyl oxidase (LOX) and lysyl oxidase-like 1-4 ( LOXL1, LOXL2, LOXL3, LOXL4 ). All members share conserved Cterminal catalytic domains that provide for lysyl oxidase or lysyl oxidaselike enzyme activity; and more divergent propeptide regions. LOX family enzyme activities catalyze the final enzymatic conversion required for the formation of normal biosynthetic collagen and elastin cross-links. LOXL2 is expressed by pre-hypertrophic and hypertrophic chondrocytes in vivo, and that LOXL2 expression is regulated in vitro as a function of chondrocyte differentiation. LOXL2 promotes chondrocyte differentiation by mechanisms that are likely to include roles as both a regulator and an effector of chondrocyte differentiation. LOXL2 expression could also be explored as a molecular target in the prevention of breast cancer progression.

# References

1.Peng, L. et al., 2009, Carcinogenesis. 30 (10):1660-9.
2.Hollosi, P. et al., 2009, Int J Cancer. 125 (2):318-27.
3.Rückert, F. et al., 2010, Int J Colorectal Dis. 25 (3):303-11.